

**IDAHO NATIONAL GUARD TRAINING AREA INVENTORY:**

**IDAHO FALLS TRAINING AREA**

**By**

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## SUMMARY

The Idaho Falls Training Area lies approximately seven miles west of Idaho Falls along U.S. Highway 20. It is an isolated 1,080-acre tract of recent lava covered with relatively high quality sagebrush-grass vegetation surrounded by agricultural land. Three rare animal species were the target of searches during June 1997, Townsend's big-eared bat, western small-footed myotis, and pygmy rabbit. No populations were discovered. Two natural plant communities occur at the site that are in high ecological quality, Wyoming big sagebrush/bluebunch wheatgrass and three-tip sagebrush/bluebunch wheatgrass.

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## INTRODUCTION

During April 1997, the Military Division of the State of Idaho entered into a Memorandum of Agreement (MOA) with the Idaho Department of Fish and Games's Conservation Data Center for the purpose of providing threatened and endangered, and sensitive species surveys on lands utilized for military training activities in the state. The Idaho National Guard utilizes 28 training areas throughout Idaho. Eight training areas were chosen for surveys during 1997, including the Idaho Falls Training Area.

The Idaho Military Division (Idaho National Guard) is responsible for ensuring proper stewardship of natural resources under its jurisdiction through various federal laws and Army regulations. For the scope of work under the MOA, threatened, endangered and sensitive species include any species listed as threatened or endangered under federal or state jurisdiction, species proposed as candidates for listing, and other species deemed rare at local, state, regional or national levels.

The Conservation Data Center (CDC) is the central repository in Idaho for information related to rare plant and animal populations, as well as data on significant ecological sites in the state. These data are organized on maps, manual files, and a series of interrelated computerized data bases encompassed by our Biological and Conservation Data System. These data bases include species and community occurrences, extensive bibliographic material, site specific ecological and management data, ecological monitoring, and others.

The Idaho CDC is a node in an international network of Natural Heritage Programs and Conservation Data Centers that occur in all the United States and in many other areas of the western hemisphere. All Natural Heritage Programs manage data in a standardized format so that data can be aggregated upward in the network for regional-, national-, and continental-scale perspectives of biodiversity protection. The Idaho CDC cooperates with numerous state, federal, county, and municipal institutions, as well as private corporations, organizations, and individuals to accomplish its mission.

## METHODS

We used a three-phase approach to field inventories of Guard training areas for rare species and habitats: (1) information gathering; (2) field inventory; and (3) documentation. Each of these phases is described below for this training area.

### Information Gathering

As explained in the Introduction, the CDC is the central repository for rare species information in Idaho. CDC biologists collect rare species information and have considerable expertise about habitats in the state. We also have developed relationships with many cooperating institutions over the years who provide us distribution information. In other words, our data bases are being continually updated

with the best information available. The first step in the process involved reviewing our map and computer data bases with help from Fish and Game's nongame biologists. From this review, we developed a target list of rare plants and animals that may occur at each of the training areas. The next step was then to review the literature or expertise of appropriate biologists to develop an inventory protocol for each species.

For the Idaho Falls Training Area the following target species were identified and inventory protocols developed:

GROUP	SPECIES	STATUS <sup>1</sup>	INVENTORY COMMENTS
Plants	None		None known in vicinity. Rare species in sagebrush-steppe usually surveyed for during May-June.
Animals	Townsend's big-eared bat ( <i>Corynorhinus townsendii</i> )	CDC: G4 S2? IFG: SC USFWS: SC BLM: S USFS: S	Historical collection (1969) from "Arco Highway Cave" in vicinity of training area. Recent observation from cave 8 miles west of area. Assess possibility of sampling (there may be no effective way to sample if there is no water or cave entrances where bats are concentrated enough to sample with mist net).
	western small-footed myotis ( <i>Myotis ciliolabrum</i> )	CDC: G5 S4? USFWS: W BLM: S	Recent observation from cave 8 miles west of area. See sampling comments for Townsend's big-eared bat above.
	pygmy rabbit ( <i>Brachylagus idahoensis</i> )	CDC: G4 S3 IFG: G, SC USFWS: W BLM: S	Known from sagebrush habitats throughout southern Idaho. Probably occurring in western Bonneville County. Surveyed for anytime during summer. Active anytime day or night.

<sup>1</sup>**Conservation Status:** CDC=Conservation Data Center/Heritage Network: G - Global/Rangewide Conservation Rank (1-5); S - State Conservation Rank (1-5). IFG = Idaho Fish and Game: G - Game Species; SC =Species of Special Concern. USFWS = U.S. Fish and Wildlife Service/Endangered Species Act: SC - Species of Concern; W - Watch Species. BLM = Bureau of Land Management: S - Sensitive Species. USFS = U.S. Forest Service: S - Sensitive Species. Definitions of these categories can be found on the CDC home page: [www.state.id.us/fishgame/cdchome.htm](http://www.state.id.us/fishgame/cdchome.htm)

### Field Inventory

Field inventories were conducted during the appropriate time(s) of the year, depending on the phenology or natural history of the target species. The training areas are small enough that a complete inventory can be made of the sites. The following types of information were collected during the inventories:

**Habitat:** If native habitats existed on the training area, the plant association(s) were identified using the *Natural Plant Communities of Idaho* catalog compiled by the CDC. An *Idaho Plant Community Observation Form* was filled out for each occurrence of the plant association at the site. Information collected on this form

includes location, size, site quality, land use, community description, successional and structural conditions, and species composition.

**Rare Plant or Animal:** If a rare species was encountered, an *Idaho Rare Animal Observation Form* or *Idaho Rare Plant Observation Form* was filled out for each occurrence at the site. Information collected on these forms include location, population size and quality, land use, and habitat description. The location was mapped on a USGS 7.5' quadrangle.

**Vascular Plant Species:** A complete list of vascular plants was made during the inventory. No voucher specimens were collected, but most species were identified using technical floras.

In the case of the Idaho Falls Training Area, June was chosen as the optimum time to conduct the field inventory. Inventories were conducted June 9-10, 1997. Two full days proved sufficient to inventory for all elements over the entire site. This inventory included early morning and late evening surveys, when pygmy rabbits are active and visible.

### Documentation

The first step in documenting the field surveys is to process the field data into various modules of the Biological and Conservation Data System (BCD) of the CDC. Here they contribute to the centralized information base about rare species, habitats, and managed areas in the state. The pertinent modules are described below.

**Training Area:** General training area information is entered into the *Managed Area* module of BCD. Information on location, ownership and management responsibility, site description, land use, references, and management description are included in this computerized record. The boundaries of the area are mapped on the CDC's base set of USGS quads for the state. They are also digitized and added to the Managed Area layer in the Department's GIS.

**Habitats:** Similar to rare species populations, occurrences of plant associations are entered into the *Element Occurrence* module (both species and communities are "elements" of biodiversity, hence the generic name element occurrence). Using field data from the Plant Community Observation Form, information for each plant association occurrence is kept on map, computer, and manual files. The computer file contains numerous fields under such headings as Location, Status (quality, dates of observation, etc.), Description, Protection, Ownership, and Documentation (sources of information about an occurrence).

**Rare Species:** As described above, populations of rare species are also cataloged in the *Element Occurrence* module of BCD, with similar information to natural communities. Field data from the Rare Animal or Rare Plant observation forms are used to populate the data base records.

*Characterization Abstracts* are used to produce status reports for each rare species encountered. Status information for vertebrate animals is abstracted in the *Vertebrate Characterization Abstract (VCA)*, while the plant abstract module is referred to as the *Plant Characterization Abstract (PCA)*. Each characterization abstract record contains both global (rangewide) as well as state-specific information. The exception is if the species is endemic to Idaho, in which case only global information is used.

The next step is to use these data bases, supplemented with other information and personal knowledge, to generate this summary report of the inventory.

## RESULTS

### Training Area

The following description was adapted from the Managed Area record for Idaho Falls Training Area (BCD record M.361; Appendix 1):

The Idaho Falls Training Area is located about seven miles west of Idaho Falls and is accessible by Highway 20, which traverses the southwestern corner of the site. It is 1,080 acres in size. The training area occurs on an isolated area of relatively recent lava surrounded by cultivated land, northeast of the much larger Hells Half Acre Flow. The topography is rolling with lava outcrops, collapsed lava tubes, and pressure ridges. A sandy-loam loess covers the lava and supports stands of Wyoming big sagebrush (*Artemisia tridentata* var. *wyomingensis*) and three-tip sagebrush (*A. tripartita*). The ecological quality of most of the vegetation is high; the site is ungrazed and other disturbances are limited to relatively small areas. There is high cover of the native annual grass, *Festuca microstachys*. In disturbed areas this species is often replaced by cheatgrass (*Bromus tectorum*), which is uncommon within the training area. The microbiotic crusts on the soil are extensive in places, also indicating high quality.

### Habitats

As mentioned above, a considerable portion of the training area is native sagebrush-grass vegetation, some in high ecological condition. The disturbances described in the managed area record (Appendix 1) are mostly local and small in size.

Two high quality stands of native plant associations were identified at the site (see Appendix 2 for more information on these occurrences):

Plant Association	CDC Occurrence Number	Approx. Size (acres)
<i>Artemisia tripartita</i> / <i>Agropyron spicatum</i>	011	25
<i>Artemisia tridentata wyomingensis</i> / <i>Agropyron spicatum</i>	015	300

## Rare Species

No rare plants are known from the vicinity of this training area and none were on the target list. Not surprisingly, none were discovered on the site during the field inventory in June. One plant of interest that does occur on the training area, however, is the painted milkvetch (*Astragalus ceramicus* var. *apus*). This beautiful plant is largely endemic to sandy sagebrush habitats on the upper Snake River Plain in Idaho. A few populations also occur in the nearby Centennial Valley of Montana. Painted milkvetch used to be considered rare and vulnerable in Idaho, but thorough surveys by the INEEL, BLM, and others have found it to be more common and secure than originally thought.

No rare animals were observed on the training area. Plenty of mountain cottontails (*Sylvilagus nuttallii*) were seen during the survey, but no pygmy rabbits, which differ from the cottontails by lacking a white tail. Pygmy rabbits are known to be relatively common in high quality sagebrush-grass stands on the upper Snake River Plain, although they are scarce and declining in parts of their range, such as the western Snake River Plain and in Washington. Although it is a sensitive species in Idaho, it is considered a game animal by Idaho Fish and Game.

I assessed the possibility of establishing mist nets to sample bat populations for the presence of the two rare species known from the vicinity, Townsend's big-eared bat and western small-footed myotis. The only effective places to sample are where bats are known to concentrate, in our situation, around water and at cave entrances. There is no surface water on the training area and I saw no cave entrances, only small overhangs resulting from collapsed lava tubes and pressure ridges. There are recent and historical sightings of these two bats from near the training area. Both species were observed in 1985 hibernating at "Sixteenmile Cave" approximately 7 miles west of the training area at the edge of the Hells Half Acre Lava Flow. There is also an historical collection of Townsend's big-eared bat, collected in 1969 from "7 miles west of Idaho Falls" at a place known as the "Arco Highway Cave." This location, although vague, must be close to the training area which is also about 7 miles northwest of Idaho Falls, depending where you measure from. I have included the occurrence record for this observation in Appendix 2.

Because there is a possibility that these three rare species may be found in or around the training area in the future, characterization abstracts for each are included in Appendix 3.

### Vascular Plant Species

I observed sixty-three vascular plant species at the training area during June 1997, including trees, shrubs, forbs (mostly), and grasses and sedges. The list appears in Appendix 4.

Appendix 1

Managed Area Basic Record

Idaho Falls Training Area (M.361)

**MISSING!**

## Appendix 2

### Communities and Rare Species Occurrence Records

#### Plant Communities:

*Artemisia tripartita/Agropyron spicatum* 011

*Artemisia tridentata wyomingensis/Agropyron spicatum* 015

#### Rare Species:

None

**MISSING!**

## Appendix 3

### Characterization Abstracts

#### Vertebrate Characterization Abstracts:

Pygmy rabbit

Townsend's big-eared bat

Western small-footed myotis

**MISSING!**

Appendix 4  
Vascular Plant Species List

**MISSING !**